

PETAPOV, L. I.

Spectra for protons and  $\pi^-$  mesons at sea level. L. I. Petapov and N. V. Shostakovich, Doklady Akad. Nauk S.S.R. 100, 641-415 (1958). Soviet Phys. "Doklady" 1, 85-86 (1958) (English translation). -- The impulse spectra of protons and pions were measured at sea level by means of a magnetic spectrometer. The proton spectrum for impulses  $P > 1.0$  b.e.v. approximates a function of the type  $N(P)dP = \alpha P^{\gamma} dP$  with  $\gamma = 2.8 \pm 0.02$  and  $\alpha = 0.69 \pm 0.049 \times 10^{-4}$  cm<sup>2</sup>/sec ster. For impulses  $P < 1.0$  b.e.v. the slope of the curve gradually decreases and for  $P = 0.5$  b.e.v. it is equal to zero. The impulse spectrum for the  $\pi^-$  mesons could not be determined properly but it showed that the  $\pi^-$  meson spectrum increases rapidly with an increase in the impulse. Ruzitskiy

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POTAPOV, L. I.

✓ 17768

ON SPECTRA OF PROTONS AND  $\pi^-$  MESONS AT SEA LEVEL. L. I. Potapov and N. V. Shostakovich (Lebedev Inst. of Physics), Doklady Akad. Nauk S.S.S.R. 106, 641-4 (1966) Feb. 1. (In Russian)

Proton and  $\pi^-$ -meson momentum spectra at sea level was measured with an Alkhanyan-Alkhanov magnetic spectrometer. A magnetic field of 7500 gauss was created by an electromagnet with poles 58 cm long and 20 cm wide and with 10 cm clearance. The experiment was carried out in three variations, which differed by the number and the location of the counters in the series placed and the magnetic poles. Results of the studies established the fact that  $\pi^-$ -meson number reduced sharply with the increase of momentum. An increase in particle number was observed, also, in the momentum range near to 1 Bev/c which cannot be explained as merely statistical fluctuations. In determining the particle mass of the abnormal ionization and momentum group it was decided that these particles, obviously, are heavy mesons with the mass of  $\sim 900 m_e$ . It is also possible that the group of particles observed in the range of 1 Bev/c are heavy mesons. (B.V.J.)

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Potapov, L. I.

537.591.1  
6750. THE SPECTRA OF PROTONS AND  $\pi^-$ -MESONS AT  
SEA-LEVEL. L.I.Potapov and N.V.Bhostakovich.  
Dokl. Akad. Nauk SSSR., Vol. 106, No. 4, 641-4 (1956). In  
Russian.

The authors employed an Alkhanyan-Alikhanov magnetic spectrometer making measurements with three variations in the numbers and arrangements of the counters below the poles of the magnet. The readings taken over a period of 2220 hours give, for intervals in the range 0.5 to  $> 5 \times 10^4$  eV/c, the numbers of positive and negative particles, the numbers of protons, energies, and intensities of the vertical proton current. The curve of the latter plotted against momentum is practically straight for momentum in excess of 1.0 BeV/c whilst for smaller momenta the slope tails off to zero. These results correspond closely with those found by Mylro and Wilson (Abstr. 5518/1951) who used a similar method, and an expression is given for this slope. The data for negative particles were not sufficient to establish the form of the  $\pi^-$ -meson spectrum. Results obtained by several workers at a height of 3200 metres show the same general form as those obtained at sea-level.

C.R.S.Manders

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POTAPOV, L.I.; SHOSTAKOVICH, N.V. [deceased]

On proton and  $\pi^-$ -meson spectra at sea level. Dokl. AN SSSR 106  
no. 4:641-644 P '56. (MLRA 9:6)

1. Fizicheskiy institut imeni P.N. Lebedeva Akademii nauk SSSR.  
Predstavleno akademikom A.I. Alikhanovym.  
(Protons--Spectra) (Mesons)

21(1)

SOV/56-36-3-8/71

AUTHORS: Dayon, M. I., Potapov, L. I.

TITLE: The  $\mu$ -Meson Spectrum in Underground at a Depth Corresponding to  $\sim 40$  m of Water ( Spektr  $\mu$  mezonov pod zemley na glubine, ekvivalentnoy  $\sim 40$  m vody)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 3, pp 697-706 (USSR)

ABSTRACT: The momentum spectra of  $\mu$ -mesons at sea level and on mountains have already been investigated by a number of authors (Refs 1-6), among others by Alikhanyan and Alikhanov. Underground, the nucleon component is rapidly absorbed and at a depth of 8-10 m the penetrating component consists of muons. It was the aim of the authors to investigate their spectrum in a depth of 40 m equivalent of water. The scheme of the experimental arrangement is shown by figure 1 and is described in short. The data concerning the counters used are clearly given by table 1. Among the total of 12 rows some hundreds of counters were arranged. The radiotechnical part of the system consisted essentially of a coincidence block and a hodoscope of the GK-7 type. The numerous measuring results are shown in tables and diagrams. Thus, table 2 gives the obtained  $\sigma$ -values at

Card 1/3

SOV/56-36-3-3/71

The  $\mu$ -Meson Spectrum in Underground at a Depth Corresponding to 40 m of Water

$H = 3300$  and  $6300$  Oe, table 3 shows the values of the light power of the apparatus for  $n = 1, 2, 3$ . The spectra constructed in consideration of light power were produced on the basis of the assumption that  $n = 2$ . In the momentum range

$p \geq 2.10^9$  ev/c the muon spectrum may be approximated by the

formula  $N(p)dp = N_0 dp / (p + p_0)^\gamma$ , where  $\gamma = 2.78 \pm 0.23$  and

$p_0 = 9.8$  Bev/c (Fig 5). This formula can also be used for the

roughly approximated description of the spectrum in the extended range at  $p \leq 2.10^8$  ev/c. The spectrum obtained permits the conclusion that the so-called anomalous muon scattering observed in a number of underground investigations can certainly

not be caused by an underestimation of the number of slow muons. The authors finally thank A. I. Alikhanyan for his help, advice, and discussions, and V. Kh. Volynskiy and V.

Krugovykh for their assistance rendered in the course of the experimental part of the work. They further thank S. N.

Vernov, N. L. Grigorov and G. B. Khristiansen for making it possible to carry out work at the podzemnaya laboratoriya

Moskovskogo gosudarstvennogo universiteta (Underground Laboratory

Card 2/3

SOV/56-36-3-8/71  
The  $\mu$ -Meson Spectrum in Underground at a Depth Corresponding to ~40 m of Water  
of Moscow State University). There are 6 figures, 3 tables,  
and 15 references, 6 of which are Soviet.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR  
(Physics Institute imeni P. N. Lebedev of the Academy of  
Sciences, USSR)

SUBMITTED: July 30, 1958

Card 5/3

21(7)

SOV/56-36-3-43/71

AUTHORS: Dayon, M. I., Potapov, L. I.

TITLE: Measurement of Particle Masses of Cosmic Radiation Under Ground (Izmereniye mass chastits kosmicheskogo izlucheniya pod zemley)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 3, pp 921-922 (USSR)

ABSTRACT: In the present "Letter to the Editor" the authors publish the results obtained by underground measurements of particle masses; they used a magnetic spectrometer which at the same time served for measuring the momentum spectrum and the positive muon excess in a depth of ~40 m water equivalent. The scheme of the measuring device was already described in an earlier paper (Ref 1). Under the device was a lead block of 6 cm thickness, and under the telescope system there was a system of lead filters which were separated from one another by layers of hodoscope counters. As no precise measurements were intended, relatively thick filters (4cm) were chosen. The root mean square error in mass determination is mentioned as amounting to 30, 17, and 12% for the filters V, VI, VII respectively. The histogram determined from

Card 1/2



SOV/56-36-3-43/71

Measurement of Particle Masses of Cosmic Radiation Under Ground

370 trajectories is shown by figure 1. All recorded positive and negative particles with  $4 \text{ cm} < R \leq 16 \text{ cm}$  were identified as  $\mu$ - (or  $\pi$ -mesons). The particle masses observed were between 100 and  $400 m_e$  with a maximum at  $200 m_e$ ; in one single case  $500 m_e$  was found. The authors finally thank A. I. Alikhanyan for help, advice, and discussions, and V. Kh. Volynskiy and V. V. Krugovykh for their great help in carrying out the experimental part of the work. There are 1 figure and 3 Soviet references.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR  
(Physics Institute imeni P. N. Lebedev of the Academy of Sciences, USSR)

SUBMITTED: July 30, 1958

Card 2/2

Potapov, L. I.

$\mu$ -MESON SPECTRUM AT A DEPTH OF  $\sim 40$  M. WATER EQUIVALENT

MEASUREMENT OF THE MASS OF COSMIC RADIATION PARTICLES  
BELOW THE SURFACE OF THE EARTH

M. I. Daiyon, L. I. Potapov

The magnetic spectrometer method was used to obtain a momentum spectrum of  $\mu$ -mesons at a depth of approximately  $\sim 40$  m. w.e. in the momentum range of  $4 \cdot 10^8 \sim 5 \cdot 10^{10}$  ev/s.

This spectrum is compared with the Caro spectrum and other spectra measured at sea level.

The mass value for 370 particles stopped in the filter (interval of ranges - 4 cm Pb  $< R < 16$  cm. Pb) determined by momentum and range.

The values obtained agree with the value of the mass of the  $\mu$ -meson ( $\pi^-$  and  $\mu$ -mesons are not resolved by the instrument).

Report presented at the International Cosmic Ray Conference, Moscow, 6-11 July 1959.

DAYON, M.I.; VOLYNSKIY, V.Kh.; POTAPOV, L.I.

Telescope made up of spark counters in a magnetic field, and  
instrument for measuring the impulses of fast charged particles.  
Prib. i tekhn. eksp. 6 no.2:47-52 Mr-Apr '61. (MIRA 14:9)

1. Fizicheskii institut AN SSSR.  
(Nuclear counters)

POTAPOV, L.N.; MIKHAYLOV, V.P.; SEL'YANKIN, I.T.; LOZOVSKIY, V.I.

Using professor Chinekel's shield in Baley Metallurgical Combine  
mines. Biul. TSIIN tsvet. met. no. 21:2-6 '57. (MIRA 11:7)  
(Baley--Mining engineering)

BORISOV, V.T.; VINTAYKIN, Ye.Z.; POTAPOV, L.P.

Determining the characteristics of the spectrum of thermal vibrations  
by X-ray measurements. Probl. metalloved. i fiz. met. no.8:413-422 '64.  
(MIRA 18:7)

L 15552-63 EWA(h)/EWT(1)/EPF(n)-2/EWP(q)/EWT(m)/BDS AFFTC/  
ASD/SSD Pu-4 WW/JD  
ACCESSION NR: AP3003891 S/0181/63/005/007/1927/1932  
AUTHOR: Potapov, L. P. 69  
65  
TITLE: Relationship between thermal capacity and the thermal factor of x-ray  
scattering 7  
SOURCE: Fizika tverdogo tela, v. 5, no. 7, 1963, 1927-1932  
TOPIC TAGS: thermal capacity, x-ray, scattering, thermal factor, frequency  
distribution, integral transformation, spectrum, dynamic theory, crystal lattice  
ABSTRACT: The author believes the function of frequency distribution to be  
essential in relating the thermal capacity and the thermal factor of x-ray  
scattering, but experimental determination of this function or its computation.  
from a convenient model is now very difficult for many substances. He has there-  
fore attempted to find a strict relationship between the two factors by using an  
arbitrary form of the frequency spectrum of a lattice by means of integral  
transformations. He begins with the dynamic theory of crystal lattices of Born  
and Huang to express thermal capacity, and from this he derives an equation to  
16  
Card 1/2

L 15552-63

ACCESSION NR: AP3003891

express the relationship between the two factors. A knowledge of this relationship may be used to determine the thermal factor at low temperatures, where experimental determinations are very difficult. "In conclusion the author expresses his gratitude to V. T. Borisov, Ye. Z. Vintaykin, and D. Ye. Temkin for a number of useful discussions on this problem." Orig. art. has: 18 formulas.

ASSOCIATION: Institut metallovedeniya i fiziki metallov, Moscow (Institute of Metal Research and Physics of Metals)

SUBMITTED: 08Jan63

DATE ACQ: 15Aug63

ENCL: 00

SUB CODE: PH

NO REF SOV: 007

OTHER: 004

Card 2/2

L 52224-65 EMT(d)/EMT(1)/EPF(c)/EBC(k)-2/EPF(n)-2/EPR/T/ENG(c) Pr-4/Pu-4

LJP(c) WW/GS/RM

ACCESSION NR: AT5010253

UR/0000/65/000/000/0027/0030

AUTHORS: Kiriyanko, V. I.; Potapov, L. P.

TITLE: Device for measuring the modulus of normal elasticity at low temperature 37  
841  
21

SOURCE: Mashiny i pribory dlya ispytaniya metallov i plastmass (Machines and instruments for testing metals and plastics); sbornik statey. Moscow, Izd-vo Mashinostroyeniya, 1965, 27-30

TOPIC TAGS: cryostat, modulus of elasticity, low temperature, low temperature research/ LIG 40 generator, LV 9 2 voltmeter, alpha steel, PPTN 1 potentiometer, PP potentiometer

ABSTRACT: A device for measuring the modulus of elasticity in the temperature range +30 to -185C is described. The principle of operation of the device is described by V. I. Korotkov (Dinamicheskiye metody izmereniya modulya uprugosti. Zavodskaya laboratoriya, T. XXII, 1956, No. 1). An LIG-40 generator with a lamp voltmeter LV-9-2 source is used with the device. Standard telephone coils with 1.2-1.3 kilo-ohms resistance are used for sound wave transmission and reception. A specially designed cryostat (see Fig. 1 on the Enclosure) is used to produce low test temperatures. The operations of signal generation and transmission, as

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L 52224-65

ACCESSION NR: AT5010253

well as frequency and temperature measurement, are described. Here 4 is the body of the cryostat, consisting of two parts connected by 3; 1 is a lid holding a steel rod 2. This rod supports holder 10 with telephone coils 6 and 9. Specimen 8 is held by three screws 7. The generator signal passes through 11 to coil 9 and follows through variable coil 6 to a voltmeter. The temperature is measured by a copper constantan thermocouple, by means of potentiometers PPTN-1 or PP. Two basic equations are used in obtaining the modulus of elasticity. The second of these equations

$$E(T) = \frac{4l_T^2 p_T \epsilon}{981 \cdot 10^6} \cdot e^{-\int_T^{T_c} \alpha dT}$$

relates the modulus of elasticity  $E(T)$  with the coefficient of linear expansion  $\alpha$ , and with the length  $l_{T_k}$  and area  $p_{T_k}$  of the test specimen at room temperature. The results of testing the device in measuring the temperature dependence of the modulus of elasticity of  $\alpha$ -steel are given in a plotted curve. The device is described as being quite accurate and the authors comment on means of further improving the accuracy. Orig. art. has: 2 equations and 2 figures.

ASSOCIATION: none

Card 2/4

L 52224-65

ACCESSION NR: AT5010253

SUBMITTED: 15Dec64

ENCL: 01

SUB CODE: MM

0

NO REF SOV: 003

OTHER: 001

Card 3/4

POTAPOV, L.F.

Fast factor in the X-ray intensity of certain metals (aluminum, tungsten, vanadium). Fiz. met. i metalloved. 19 no.1:131-133 Ja '65. (MIRA 18:4)

1. Institut metallovedeniya i fiziki metallov Tsentral'nogo nauchno-issledovatel'skogo instituta chernoy metallurgii imeni Bardina.

L 53732-66 EMT(m)/ENP(w)/ENA(d)/EPR/T/ENP(t)/ENP(k)/ENP(l)/ENP(b)/ENA(c) Pf-4/  
Pad/Ps-4 LJP(c) JD/HH

ACCESSION NR: AP5011757

UR/0126/55/019/004/0531/0533  
539.25

AUTHOR: Perkas, M. D.; Potapov, L. P.

TITLE: Variation in the physical properties of martensite during aging

SOURCE: Fizika metallov i metallovedeniye v. 19, no. 4, 1965, 631-633

TOPIC TAGS: martensite, metal physical property, aging, maraging alloy

ABSTRACT: Aging was studied in Fe-Ni martensites containing Ti or Al. Two alloys, Fe+8% Ni+1.5% Ti and Fe+8% Ni+1.5% Al, were quenched from 900°C, and then aged in the 350-600°C temperature range. This aging process increases the strength and changes such physical properties as the modulus of elasticity ( $E$ ), electrical resistance ( $\rho$ ), Vicker's hardness ( $HV$ ), coefficient of thermal expansion ( $\alpha$ ), and characteristic "x-ray" temperature ( $\theta$ ). The curves for  $\alpha$ ,  $\Delta E/E$ , and  $HV$  as functions of aging temperature all show maxima. Those for  $\rho$  and  $\theta$  show minima. The maxima and minima mentioned do not always coincide with the same aging temperature, but fall within a range of temperatures from 500 to 600°C. The results are explained by redistribution of the atoms in the solid solution with martensite and/or the

Card 1/2

L 53732-65

ACCESSION NR: AP5011757

appearance of a new phase, possessing a high modulus of elasticity. Electron microscope analysis of thin foils of the Fe-Ni-Ti alloy after aging confirmed the presence of a NiTi phase, having an ordered structure similar to CsCl. The change in physical properties is thus associated with the beginning of segregation of a new phase. There are no changes in physical properties when Fe + 8% Ni is heated in the 200-700°C range. Orig. art. has: 3 figures.

ASSOCIATION: Institut metallovedeniya i fiziki metallov TsNIChERMET im. I. P. Bardina (Institute of Metal Science and the Physics of Metals, TsNIChERMET)

SUBMITTED: 27Jul64

ENCL: 00

SUB CODE: KM

NO REF SOV: 004

OTHER: 000

Card 2/2

MIRINSKIY, D.S.; POTAPOV, I.P.; STRELKOV, P.G.

Errors caused by the optical system of a dilatometer. Izv. tekh. no. 8:21-  
23 AR '64. (MIRA 17:12)

BORISOV, V.T.; VINTAYKIN, Ye.Z.; POTAPOV, L.P.

Characteristics of the thermal vibration spectrum. Fiz. tver tela  
5 no.9:2530-2537 S '63. (MIRA 16:10)

1. Institut metallovedeniya i fiziki metallov Tsentral'nogo nauchno-  
issledovatel'skogo instituta chernoy metallurgii im. I.P.Bardina,  
Moskva.

MAMBETALIYEVA, Kaken; POTAPOV, L.P., otv. red.; BUTENKO, N.P.,  
red. izd-va; POPOVA, M.G., tekhn.red.

[Mode of life and culture of the Kirghiz coal miners in  
Kirghizistan] Byt i kul'tura shakhterov - kirgizov ka-  
mennougol'noi promyshlennosti Kirgizii. Frunze, Izd-vo  
AN Kirgiz.SSR, 1963. 122 p. (MIRA 17:1)



POTAPOV, L.P.

Methods of measuring the heat factor in the scattering of X rays. Fiz.  
met. i metalloved. 16.no.1:24-28 J1 '63. (MIRA 16:9)

1. Institut metallovedeniya i fiziki metallov Tsentral'nogo nauchno-  
issledovatel'skogo instituta chernoy metallurgii.  
(X rays—Scattering) (Thermochemistry)

POTAPOV, L.P.

Relation between heat capacity and the thermal factor of X-ray  
scattering. Fiz. tver. tela 5 no.7:1927-1932 JI '63.  
(MIRA 16:9)

1. Institut metallovedeniya i fiziki metallov, Moskva.  
(X rays—Scattering) (Heat capacity)

POTAPOV, L.P.

Cryostat for X-ray diffraction studies at low temperatures. Prib.  
i tekhn. eksp. 7 no.1:196-197 Ja-F '62. (MIRA 15:3)

1. Institut metallovedeniya i fiziki metallov Tsentral'nogo  
nauchno-issledovatel'skogo instituta chernoy metallurgii.  
(Cryostat)

35802

S/120/62/000/001/052/061  
E052/E314

24 5600

AUTHOR: Potapov, L.P.

TITLE: A cryostat for low-temperature X-ray studies

PERIODICAL: Pribery i tekhnika eksperimenta, no. 1, 1962,  
196 - 197

TEXT: The author describes a device for X-ray diffraction studies of various specimens in the temperature range between that of liquid N and room temperature. The apparatus is illustrated in the figure. The cooling is achieved by heat-transfer between a cooling agent and the freely suspended specimen surrounded by heat-conducting gas. This method of cooling was developed by P.G. Strelkov and S.I. Novikova (Ref. 1 - PTE, 1957, no. 5, 105). The first version of the present apparatus was described by P.G. Strelkov and the present author in Ref. 2 (Paper read at VNIIFTRI, 1958). The notation in the figure is as follows: 1 - body of cryostat (brass tube 60 mm in diameter); 2 - transverse slots covered with vacuum-tight celluloid film; 3 - thermal screen (copper foil);

Card 1/3

A cryostat ....

S/120/62/000/001/052/061

EO32/E314

4 - cooler filled with cooling agent; 5 - thermal insulator (cylindrical plastic tube); 6 - perspex container (0.3 mm thick at the point where it is traversed by X-rays). This container separates the body 1 from the cooler 4 into two vacuum-tight regions; 7 - cylindrical specimen (14 mm in diameter, 0.7 - 1 mm thick). The specimen is attached to a rod which is free to rotate on agate supports; 8 - magnets attached to the rod and brought into motion by the external magnet 10 operated by the motor 1; 9 - copper lid with specimen-holder; 12, 13, 14 - specimen-adjustment device. The device can be used to measure the intensity of X-ray reflections right down to liquid N temperatures at reflection angles in the range of 15 - 85 °C. Intermediate temperatures can be obtained by using different cooling agents or by placing the cooling agent in a copper container and adjusting its position relative to the specimen. Acknowledgments to V.A. Il'ina for advice on this work. There is 1 figure.

Card 2/3

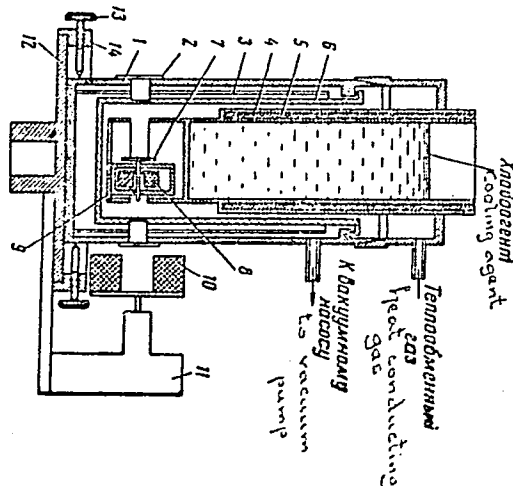
A cryostat ....

S/120/62/000/001/052/061  
EO32/E314

ASSOCIATION: Institut metallovedeniya i fiziki metallov  
TsNIIChermet (Institute of Metallurgy and  
Physics of Metals of TsNIIChermet)

SUBMITTED: June 22, 1961

Figure:



Card 3/3

POTAPOV, M.

Use motortrucks on the by-the-job instead of by-the-hour basis.  
Avt. transp. 42 no. 5:35-36 My '64. (MIRA 17:5)

1. Nachal'nik otdela ekspluatatsii 19-y avtobazy Upravleniya po  
tsentralizovannym perevozkam stroitel'nykh грузов Glavmosavtot-  
ransa.

POTAPOV, M.; TSIRKIN, A., inzh.-dispetcher

Mortar and concrete transportation should be centralized. Avt.  
transp. 41 no.9:12-13 S '63. (MIRA 16:10)

1. Nachal'nik otdela ekspluatatsii avtobazy No.19 Mosstroytransa  
(for Potapov). 2. Trest "Mosstroy" No.4 Glavnogo upravleniya po  
zhilishchnomu i grazhdanskomu stroitel'stvu v gorode Moskve  
Moskovskogo gorodskogo soveta deputatov trudyashchikhsya  
(for TSirkin).



POTAPOV, M.

Team for grain transportation. Avt. transp. 41 no. 3123-24  
Mr '63. (MIRA 16:4)

1. Nachal'nik otdela ekspluatatsii avtobazy No. 19  
Mosstroytransa.

(Grain--Transportation)

POTAPOV, M.

Sochineniia (Collected Works in 3 Volumes)

Vol. 1 397 p. 1.50

Vol. 2 519 p. 1.75

Vol. 3 478 p. 1.75

SO: Four Continent Book List, April 1954

POTAPOV, M.

File on exchange of experience. Avt.transp. 33 no.3:36 Nr 155.  
(Transportation, Automotive) (MIRA 8:5)

Hungary/Plant Physiology

Respiration and Metabolism

H-2

Abs Jour : Referat. Zh - Biol., No 6, 25 March 1957, 22346

Author : Potapov, Maroti

Inst : Not given

Title : Synthesis of nucleic acids in the root and stem of bean sprouts.

Orig Pub : Agrochem. es talaj., 1956, 5, No 1, 57-68

Abstract : The whole sprouts, isolated roots and stems of beans of the Sakharava variety were cultivated in sterile cultures on a sugared agar White medium with the addition of a yeast extract (for whole sprouts) or vitamins (for isolated organs). The length, raw and dry weight of roots and stems was determined, and also their content of P nucleic acids (by methods of Taylor-Miller and Leviba-Harrington-Bukalo) in a 12 day cultivation. The length, weight and quantity of total and nucleic acid P per organ were considerably higher for roots than for the stems in cultivations of whole sprouts as well as in those of isolated organs. The content of nucleic acids P percentage-wise of total P in cultivation of whole sprouts was higher in the stems, while for cultivations of isolated

Card 1/2

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Hungary/Plant Physiology

Respiration and Metabolism

H-2

Abs Jour : Referat. Zh - Biol., No 6, 25 March 1957, 22346

organs, in the roots. The authors come to the conclusion that the capacity to synthesize nucleic acids is considerably more developed in roots than in stems. In cultivation of the whole sprout the stems evidently receive nucleic acids from the roots. This study was carried out at Budapest University. Bibl. 43 refs.

Card 2/2

-16-

BABAYANTS, Israil Sergeyevich; POTAPOV, M.A., red.; VENTSEL', I.V.,  
red.izd-va; BELOGUROVA, I.A., tekhn. red.

[Technology of making windings from glass insulated copper  
wire] Tekhnologiya namotki izdelii mednym provodom v stek-  
liannoi izoliatsii. Leningrad, 1963. 16 p. (Leningradskii  
dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opy-  
tom. Seriya: Pribory i elementy avtomatiki, no.4)

(MIRA 16:12)

(Electric insulators and insulation)  
(Electric apparatus and appliances--Windings)

SOLDATKIN, M.T., dotsent, kand.tekhn.nauk; POTAPOV, M.A.; SHIMKEVICH, S.K.

Recommended methods for ventilating fiber dyeing plants of cloth  
combines. Spor. nauch. trud. Bel. politekh. inst. no.74:28-47  
'59. (MIRA 13:8)

(Textile factories--Heating and ventilation)

ПОТАПОВ, Михаил Александрович.

District library work. 3. izd., dop. i ispr. Moskva, Gos. izd-vo kul'turno-  
prosvetitel'noi lit-ry, 1952. 66 p.

1. Library science.



*POTAPOV, M.A.*

KOZHEVNIKOV, B.A., kand. tekhn. nauk; POTAPOV, M.A., inzh.

Fine wire in glass insulation. Vest. elektroprom. 27 no.8:59-61

Ag '56.

(MLRA 10:9)

1. Lenfilial nauchno-issledovatel'skogo instituta kabel'noy promyshlennosti.

(Electric wire)

POTAPOV, M.D.

Nonstationary characteristics of pulse systems. Avtom. upr. i vych.  
tekh. no.3:218-232 '60. (MIRA 13:11)

(Pulse techniques (Electronics))

POTAPOV, M.D. (Moskva)

Synthesis of discrete corrective devices based on the criteria of  
finite control time. Avtom. i telem. 23 no.4:433-440 Ap '62.  
(MIRA 15:4)

(Automatic control)

25738

S/123/61/000/012/027/042

A004/A101

16,8000 (1031,1121,1344)

AUTHOR: Potapov, M. D.

TITLE: On the non-steady properties of pulse systems

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 12, 1961, 3-4, abstract 12D25 (V sb. "Avtomat, upr. i vychisl. tekhn." no. 3, Moscow, Mashgiz, 1960, 218-232)

TEXT: It is pointed out that the utilization of Z-transformation makes it possible to investigate pulse systems, making use of the usual notions and conceptions of the theory of continuous systems. Using this transformation the author describes the effect of the moment of application of the controlling action on the pulse system processes and presents the necessary calculation formulae. He analyzes the dependence of the reaction of a similar closed pulse system on the time of disturbance application, acting directly on the input of any unit of the continuous part of the system. There are 5 figures and 3 references.

I. Alimov

[Abstracter's note: Complete translation]

Card 1/1

16,8000

S/044/61/000/008/023/039  
C111/C333

AUTHOR: Potapov, M. D.

TITLE: On instationary properties of impulse systems

PERIODICAL: Referativnyy zhurnal, Matematika, no. 8, 1961, 73,  
abstract 8B357. ("Avtomat. upr. i vychisl. Tekhn.",  
Vyp. 3, M., Mashgiz, 1960, 218-232)

TEXT: The author investigates a family of transition functions which are generated by the set of the initial values  $\tau$  in the interval  $(0, T)$  with the aid of a discrete selection of the process values in systems with digital apparata. Since  $\tau$  is bounded, the domain of the transients is bounded and depends on the ratio of the step  $T$  of the discrete system and of the variable circuit ratio  $\tau/T$ . B ✓

[Abstracter's note: Complete translation.]

Card 1/1

S/194/61/000/009/021/053  
D209/D302

16 8000

AUTHOR: Potapov, M.D.

TITLE: On non-stationary properties of impulse systems

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,  
no. 9, 1961, 29, abstract 9 V242 (V sb. Avtomat. upr.  
i vychisl. tekhn., no. 3, M., Mashgiz, 1960, 218-232)

TEXT: The effect of the moment of applying control action  
on impulse system processes is examined and necessary calculated  
formulae are introduced. The change of the system reaction caused  
by the change of moment of entry of disturbance acting directly at  
the input of any element of the continuous part of the system is  
investigated. The application of calculated relationships is illu-  
strated on examples of simpler systems with an impulse element and  
a discrete correcting arrangement. [Abstracter's note: Complete  
translation]

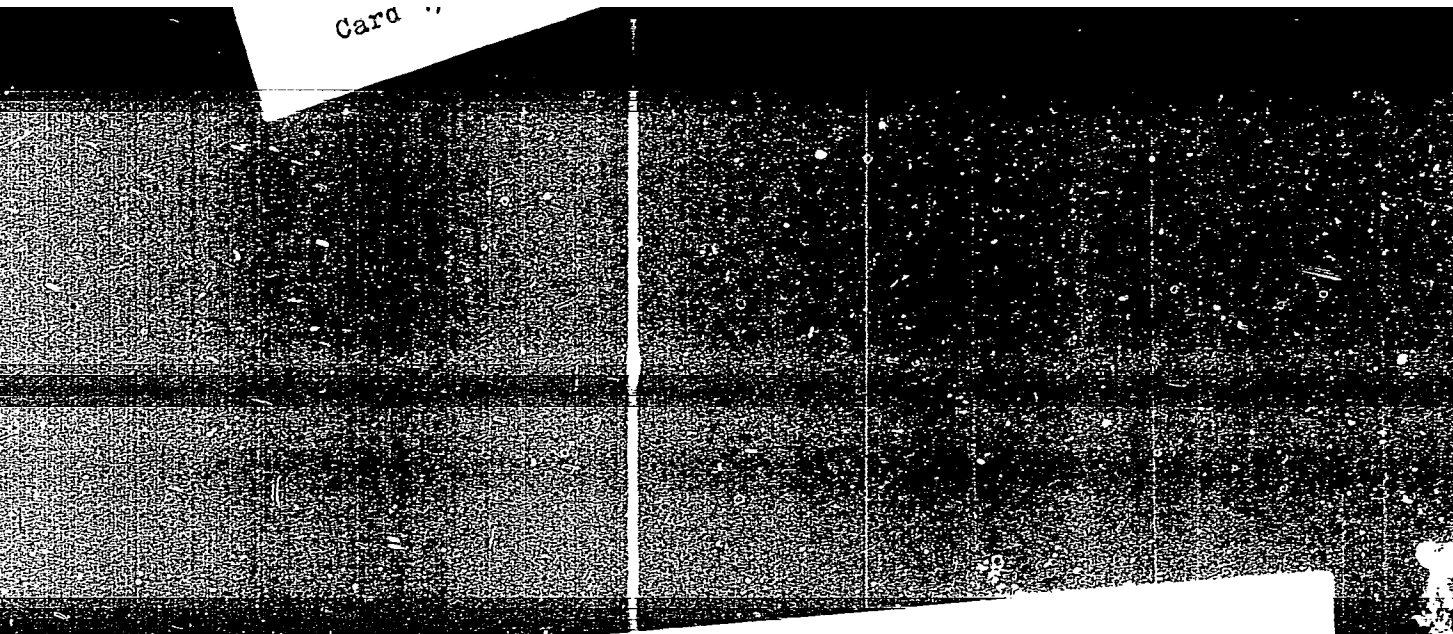
Card 1/1



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APPROVED FOR RELEASE: Tuesday, August 01, 2000

CIA-RDP86-00513R0013427



Synthesis of discrete compensating ...

S/103/62/023/004/001/011  
D299/D301

where  $f_i$  are weighting factors. An examination of Eqs. (11) and (12) shows that the polynomial  $A(z)$  cannot be given arbitrarily, but should satisfy certain conditions; this in turn, yields the following condition for the finite controltime

$$t_p \geq (m + r - 1)T. \quad (15)$$

The design of the system amounts to calculating the coefficients of the polynomials  $A(z)$  and  $D_{20}(z)$  from (11), and determination of  $D(z)$  from 2 earlier formulas. In a number of cases, the above method can be simplified, (as set forth below). Method of reducing the period of pulse repetition, while leaving the transient function unchanged: It is assumed that  $r = 1$ , and  $q$  is either zero, or unity. It is shown that  $T$  can be reduced (by an integral multiple), with unchanged transient function; thereby the number of intervals increases by the same factor. Formulas are obtained which show that the step curve of the system with the reduced period  $T_k$  coincides with the curve of the original system only if the polynomial  $A(z_k)$

Card 3/4

S/103/62/023/004/001/011  
D299/D301

Synthesis of discrete compensating ...

satisfies certain additional (to (11)) conditions. The order of the calculations is set forth, when passing from the condition  $t_p = nT$ , to the condition  $t_p = knT_k$ . The above considerations are illustrated by a numerical example. Conclusions: The transfer function  $\Phi(z)$  has to satisfy certain conditions. Working formulas are obtained which make it possible to realize various transient processes and to solve the synthesis problem by using additional convenient performance-criteria. It is shown that  $T$  can be reduced by a multiple factor, with unchanged transient function; this involves recalculation of the system; the method thereby used, is set forth. The calculation reduces to simple algebraic operations. There are 2 figures and 6 references: 3 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language publications read as follows: S.I. Jury, W. Schroeder, Discrete Compensation of Sampled-Data Continuous Control Systems. Appl. and Industry, no. 28, 1957; J.R. Ragazzini, Digital Computers in Feedback Systems, IRE Nation. Convent. Record, pt. 4, 1957; J.R. Ragazzini, G.F. Franklin, Sampled-Data Control Systems, N.Y., McGraw-Hill, 1958.

SUBMITTED: September 19, 1961

Card 4/4

SPIVAKOVSKIY, Aleksandr Onisimovich; POTAPOV, Mikhail Gennadiyevich, kand. tekhn. nauk; ANDREYEV, Aleksey Vladimirovich, kand. tekhn. nauk; ZURKOV, P.E., prof., doktor tekhn. nauk, re-tsenzent; LYUBIMOV, N.G., otv. red.; IL'INSKAYA, G.M., tekhn. red.

[Transportation in open-pit mines] Transport na otkrytykh razrabotkakh. Moskva, Gosgortekhnizdat, 1962. 392 p.  
(MIRA 15:10)

1. Chlen-korrespondent Akademii nauk SSSR (for Spivakovskiy).

(Mine haulage)

POTAPOV, M.G., kand.tekhn.nauk.

Method of establishing electric locomotive horsepower for open  
pit coal mines. Nauch.trudy MGU no.15:111-115 '55. (MIRA 10:10)  
(Mine railroads)  
(Electric locomotives)

*PCT APPROVED*

GONCHAROV, Yu.O., Ing.-Tech. Sci. D., Kandidat tekhnicheskikh nauk.

"Electric railroads and strip mining" by V.B. Semstuk.  
Reviewed by 1977. Author: V.B. Potapov. Gorkisur. no. 7-77  
S. 157. (MIRA 1-77)

(Electric railroads) (Strip mining)

(Semstuk, V.B.)

POTAPOV M.G.

Problems in the Exploitation (Cont.) 879  
of Mineral Ore Deposits, Moscow, Izd-vo- AN SSSR, 1958, 251pp.

Potapov, M.G., Candidate of Technical Sciences. Operation of Open-Cut Electric Locomotives Loading Trains Directly from Excavators 231  
The author presents a theoretical study of loading diagrams for electric locomotives. These concern the electromechanical characteristics of the motor in relation to the efficiency of operations. There are 4 figures and 2 tables. There are no references.

[Author not given]. Mikhail Ivanovich Agoshkov (Fiftieth Birthday Anniversary) 247

This is a brief biographical sketch of Professor M.I. Agoshkov, in honor of his 50th birthday. Professor Agoshkov, a distinguished mining engineer and a Corresponding Member of the Academy of Sciences, USSR, is the author of more than 50 published works. He has received a number of medals and honorific titles, among them the Order of the Red Banner of Labor and the Badge of Honor.

AVAILABLE: Library of Congress

Card 11/11

MM/sfm  
12-18-58

POTAPOV, Mikhail Georgiyevich; SHUMILOV, A.N., kand. tekhn. nauk, red.;  
BOBROVA, Ye.N., tekhn. red.

[Protecting railroad track from snow] Zashchita zheleznodorozhnogo  
puti ot snega. Moskva, Gos. transp. zhel-dor. izd-vo, 1958. 119 p.  
(Railroads--Snow protection and removal) (MIRA 11:8)

POTAPOV, M.G.

Similitude theory for calculations of electric transportation in  
open pit mines. Nauch.trudy MGI no. 20:315-321 '58. (MIRA 11:8)

(Dimensional analysis)

(Strip mining)

(Mine railroads)



107050V 171-0-  
 ALATORTSEV, S.A., prof., doktor tekhn.nauk; ANDREYEV, A.V., kand.tekhn.nauk; ANCHAROV, I.L., inzh.; BALINSKIY, S.I., inzh.; BELOUSOV, V.G., inzh.; VINNITSKIY, K.Ye., kand.tekhn.nauk; VLASOV, V.M., inzh.; VORONTSOV, N.P., kand.tekhn.nauk; GIPSMAN, M.K., inzh.; GLUZMAN, I.S., kand.tekhn.nauk; GUR'YEV, S.V., kand.tekhn.nauk [deceased]; DEMIN, A.M., kand.tekhn.nauk; YEGURNOV, G.P., kand.tekhn.nauk; YEFIMOV, I.P., inzh.; ZHUKOV, L.I., kand.tekhn.nauk; ZEL'TSER, N.M., inzh.; KOSACHEV, M.M., kand.tekhn.nauk; KOTOV, A.F., inzh.; KUDINOV, G.P., inzh.; LAPOVENKO, N.A., kand.tekhn.nauk; MAZUROK, S.F., inzh.; MEL'NIKOV, N.V.; MUDRIK, N.G., inzh.; NIKONOV, G.P., kand.tekhn.nauk; ORLOV, Ye.I., inzh.; POTAPOV, M.G., kand.tekhn.nauk; PRISEDSKIY, G.V., inzh.; RZHEVSKIY, V.V., prof., doktor tekhn.nauk; RYAKHIN, V.A., kand.tekhn.nauk; SIMKIN, B.A., kand.tekhn.nauk; SITNIKOV, I.Ye., inzh.; SOROKIN, V.I., inzh.; STASYUK, V.N., kand.tekhn.nauk; STAKHEVICH, Ye.B., inzh.; SUSHCHENKO, A.A., inzh.; TYUTIN, I.F., inzh.; TYMOVSKIY, L.G., inzh.; FISENKO, G.L., kand.tekhn.nauk; FURMANOV, B.M., inzh.; SHATAYEV, M.G., inzh.; SHESHKO, Ye.F., prof., doktor tekhn.nauk; TERPIGOREV, A.M., glavnyy red. [deceased];

(Continued on next card)

ALATORTSEV, S.A.---(continued) Card 2.

KIT, I.K., zamestitel' glavnogo red.; SHESHKO, Ye.F., zamestitel' otv.red.; BUGOSLAVSKIY, Yu.K., red.; BYKHOVSKAYA, S.H., red.; DIONIS'YEV, A.I., kand.tekhn.nauk, red.; KOZIN, Yu.V., red.; SOKOLOVSKIY, M.M., red.; YASTREBOV, A.I., red.; DEMIDYUK, G.P., kand.tekhn.nauk, red.; KRIVSKIY, M.N., kand.tekhn.nauk, red.; LYUBIMOV, B.N., inzh., red.; MOLOKANOV, P.L., inzh., red.; REISH, A.K., inzh., red.; RODIONOV, L.Ye., kand.tekhn.nauk, red.; SLAVUTSKIY, S.O., inzh., red.; TRAKHMAN, A.I., inzh., red.; TRYNOVSKIY, L.G., inzh., red.; FIDELEV, A.S., doktor tekhn.nauk, red.; SHUKHOV, A.N., kand.tekhn.nauk, red.; TER-IZRAEL'YAN, T.G., red. izd-va; PROZOROVSKAYA, V.L., tekhn.red.; KONDRAT'YEVA, M.A., tekhn.red.

(Continued on next card)

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[Mining; an encyclopedic dictionary] Gornoe delo; entsiklopedicheskii spravochnik. Glav.red.A.M.Terpigorev. Chleny glav. red.A.I.Baranov i dr. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu. Vol.10. [Mining coal deposits by the open-cut method] Razrabotka ugol'nykh mestorozhdenii otkrytym sposobom. Redkollegiia toma; N.V.Mel'nikov i dr. 1960. 625 p.

(MIRA 13:2)

1. Chlen-korrespondent AN SSSR (for Mel'nikov).  
(Coal mines and mining) (Strip mining)

POTAPOV, M.G., kand.tekhn.nauk

Classification of transportation systems in open-cut mines. Nauch.  
soob.IGD 24:45-48 '65. (MIRA 18:10)

POTAPOV, M.G., kandidat na tekhn. nauki; MOLCHANOV, P.V., kandidat  
na tekhn. nauki

Conveying transport in the quarries in East Germany.  
Min delo 18 no.8:42-45 Ag '63.

MEL'NIKOV, N.V.; VINITSKIY, K.Ye., kand.tekhn.nauk; POTAROV, N.N., kand.  
tekhn.nauk

Basic problems of continuous operation in open-pit mines. Gor.  
zhur. no.9:11-16 S '61. (MIRA 16:7)

1. Institut gornogo dela im. A.A.Skochinskogo, Moskva. 2. Chlen-  
korrespondent AN SSSR (for Mel'nikov).  
(Conveying machinery)

MEL'NIKOV, M.V.; VINITSKIY, K.Ye., kand. tekhn. nauk; POTAPOV, M.G.,  
kand. tekhn. nauk; Prinimali uchastiye: ZHUKOV, A.A.;  
KOSYREV, V.I.; SPIRIDONOV, V.I.

Principles of technological layouts for open-pit mines using  
conveyor haulage ~~exclusively~~. Nauch. soob. IGD 11:3-16 '61.  
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1. Chlen-korrespondent AN SSSR (for Mel'nikov).  
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POTAPOV, M.G., kandidat technickych ved

Effectiveness of beltconveyers in quarries. Uhli 4  
no.3:94-96 Mr '62.

1. Hornicky institut A.A. Skocinskeho, Moskva.



MEL'NIKOV, Nikolay Vasil'yevich, akademik; SIMKIN, Boris Aleksandrovich, kand. tekhn. nauk; DEMIDYUK, Grigoriy Prokop'yevich, kand. tekhn. nauk; VINITSKIY, Konstantin Yefimovich, kand. tekhn. nauk; STAKHEVICH, Yekaterina Borisovna, inzh.; KRASNIKOV, Aleksey Sergeevich, kand. tekhn. nauk; CHERNEGOV, Yuriy Aleksandrovich, inzh.; POTAPOV, Mikhail Gennad'yevich, kand. tekhn. nauk; CHESNOKOV, Mitrofan Mitrofanovich, kand. tekhn. nauk; NURMUKHAMEDOVA, V.F., red. izd-va; SHKLYAR, S.Ya., tekhn. red.

[Foreign technique of open-pit mining] Tekhnika otkrytykh gornykh rabot za rubezhom. Moskva, Gosgortekhzdat, 1962. 379 p.  
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(Strip mining)

MEL'NIKOV, Nikolay Vasil'yevich, akademik; VINITSKIY, Konstantin Yefimovich; POTAPOV, Mikhail Gennadiyevich; LIKHTER, B.I., red. izd-va; NOVICHKOVA, N.D., tekhn. red.

[Principles of the continuous process of open-pit ore mining; developing the iron ore deposits of Kustanay Province] Osnovy potochnoi tekhnologii otkrytoi razrabotki mestorozhdenii; osvoenie zhelezorudnykh mestorozhdenii Kustanaia. Moskva, Izd-vo Akad. nauk SSSR, 1962. 174 p. (MIRA 15:9)  
(Kustanay Province--Iron mines and mining)

POTAPOV, M.G., kand.tekhn.nauk; MOLCHANOV, P.V., kand.tekhn.nauk

Expansion of conveyer transport in the open-pit mines of the  
German Democratic Republic. Ugol' 37 no.3:60-61 Mr '62.  
(Germany, East--Mine haulage) (Conveying machinery) (MIRA 15:2)

VINITSKIY, K.Ye., kand.tekhn.nauk; POTAPOV, M.G., kand.tekhn.nauk

Study of the parameters of mine transportation equipment for iron-  
ore pits of Kustanay Province. Nauch.soob.Inst.gor.dela 5:12-21

'60.

(MIRA 15:1)

(Kustanay Province--Mine haulage)

ZLOTIN, Vladimir Isaakovich; KAZHDAN, Shimon Mordukhovich; TUNKEL',  
Naum Ruvimovich; SHELESHKOV, Konstantin Konstantinovich.  
Prinimali uchastiye: GRIBANOV, A.F.; OL'KHOV, V.I.;  
POTAPOV, M.G., kand. tekhn. nauk, retsenzent; NURMUKHAMEDOVA,  
V.F., red. izd-va; OVSEYENKO, V.G., tekhn. red.

[Electric locomotive and dump car haulage in open pits] Elektrovozo-  
dumpkarnoe khoziaistvo na kar'erakh. Moskva, Gos. nauchno-tekhn.  
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(Mine railroads) (Strip mining)

RZHEVSKIY, V.V., prof., dokt. tekhn. nauk; BUYANOV, Yu.D., kand. tekhn. nauk;  
VASIL'YEV, Ye.I., kand. tekhn. nauk; DEMIN, A.M., kand. tekhn. nauk;  
KULESHOV, N.A., kand. tekhn. nauk; MEN'SHOV, B.G., kand. tekhn. nauk;  
NEVSKIY, V.N., kand. tekhn. nauk; POTAPOV, M.G., kand. tekhn. nauk;  
RODIONOV, L.Ye., kand. tekhn. nauk; SIMKIN, B.A., kand. tekhn. nauk;  
SUKHANOVA, Ye.M., kand. tekhn. nauk; YUMATOV, B.P., kand. tekhn. nauk;  
KHOKHRYAKOV, V.S., kand. tekhn. nauk; ALEKSANDROV, N.N., gornyy inzh.;  
ARISTOV, I.I., inzh.; BUGOSLAVSKIY, Yu.K., gornyy inzh.; DIDKOVSKIY,  
D.Z., inzh.; ONOTSKIY, M.I., inzh.; STAKHEVICH, Ye.B., inzh.;  
GEYMAN, L.M., red. izd-va; MAKSIMOVA, V.V., tekhn. red.; KONDRAT'YEVA,  
M.A., tekhn. red.

[Handbook for the strip-mine foreman] Spravochnik gornogo mestera  
kar'era. Pod red. V.V. Rzhhevskogo. Moskva, Gos. nauchno-tekhn. izd-vo  
lit-ry po gornomu delu, 1961. 572 p. (MIRA 14:12)  
(Strip mining)

KRIVOSHOV, E., student V kursa; POTAPOV, M.G., kand.tekhn.nauk

Choosing a practical transportation system for the Kedrovka  
deposit. Nauch. rab. stud. GNSO MGI no.7:93-107 1959.

(MIRA 14:5)  
(Kedrovka region(Kemerovo Province)--Mining haulage)

VINITSKIY, K.Ye., kand.tekhn.nauk; POTAPOV, M.G., kand.tekhn.nauk

Research on the parameters of mine transportation equipment for  
the iron ore pits of Kustanay Province. Trudy Inst. gor. dela  
5:12-21 '60. (MIRA 14:5)  
(Kustanay Province—Strip mining) (Mine haulage)



GEY, N.N., kand.tekhn.nauk; POTAPOV, M.G., inzh.; LITVINSKIY, I.A., inzh.

More discussion on the economics of lumber drying by the induction method. Der,prom. 10 no.5:4-6 My '61. (MIRA 14:5)

1. Kiyevprgtekhtsroy (for Gey). 2. Glavkiyevstroy (for Potapov).
3. Derevoobrabatyvayushchiy zavod No.1 (for Litvinskiy).  
(Lumber--Drying)

SPIVAKOVSKIY, A.O.; MEDVEDEV, L.G.; POTAPOV, M.G.; D'YAKOV, V.A.

Prospects of expansion and ways of improving conveyer-transportation  
in open-pit mining. Ugol' 36 no.2:17-21 F '61. (MIRA 14:2)

(Strip mining) (Conveying machinery)

MEL'NIKOV, N.V.; VINITSKIY, K.Ye., kand.tekhn.nauk; ROZANOV, M.G., kand.  
tekhn.nauk

Over-all mechanization of large open pits. Mekh.i avton. proizvod.  
15 no.2:30-32 F '61. (MIRA 14:2)

1. Chlen-korrespondent AN SSSR (for Mel'nikov).  
(Mining engineering--Technological innovations)

POTAPOV, M.G., kand.tekhn.nauk

Equipment for open-pit mine haulage in foreign countries. Gor.  
zhur. no.10:54-58 0 '60. (MIRA 13:9)

1. Institut gornogo dela AN SSSR, Lyubertsy Moskovskoy oblasti.  
(Mine haulage--Equipment and supplies)  
(Strip mining--Equipment and supplies)

KHOKHLOV, Yevgeniy Anstol'yevich, inzh.; SOROKIN, Vladimir Ivanovich, inzh.;  
POTAPOV, M.G., otv.red.; KOLOMIYTSYEV, A.D., red.izd-va; BEREZSLAV-  
SKAYA, L.Sh., tekhn.red.; BOLDYREVA, Z.A., tekhn.red.

[Electric traction in strip mines] Elektricheskaya tiaga na ugol'-  
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(Mine railroads)

MEL'NIKOV, N.V.; VINITSKIY, K.Ye., kand.tekhn.nauk; POTAPOV, M.G.,  
kand.tekhn.nauk; USKOV, A.A., red.; ~~POKROVSKIY, M.A., red.~~;  
RZHEVSKIY, V.V., red.; SOKOLOVSKIY, M.M., red.; DAVIDENKO,  
Yu.K., red.; YASTREBOV, A.I., red.; KAUFMAN, A.M., red.izd-va;  
LOMILINA, L.N., tekhn.red.

[Prospects for the use of rotating excavators in U.S.S.R.  
open-pit mines] Perspektivy primeneniia rotornykh ekskavatorov  
na otkrytykh razrabotkakh SSSR. Pod red. N.V.Mel'nikova.  
Moskva, Ugletekhizdat, 1959. 175 p. (MIRA 12:12)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy nauchno-tekhni-  
cheskiy komitet.

(Excavating machinery)

(Strip mining)

ПОТАПОВ, М.Г., кандидат технических наук

Truck transport in the mines of the U.S.A. Mekh.trud.rab.10 no.3:  
42-46 Mr '56. (MIRA 9:7)  
(United States--Mine haulage)

*POTAPOV M.G.*  
POTAPOV, M.G., inzhener

Active snow protection. Tekh.zhel.dor.6 no.7:25-26 J1'47. (MLRA 8:11)  
(Railroads--Snow protection and removal)



POTAPOV, M.G., kandidat tekhnicheskikh nauk.

Basic parameters for electric locomotives in coal mines. Ugol'  
31 no.6:27-31 Je '56. (MLRA 9:8)  
(Electric locomotives) (Mine railroads)

POTAPOV, M. G.

PA 28T50

USSR/Engineering

Jul 1947

Snow

Walls, Retaining

"Retaining Walls for Snow," M. G. Potapov, 2 pp

"Tekh Zheleznykh Dorog" No 7

The author discusses a retaining wall built on a principle which utilizes the force of the wind to blow the snow over the point to be kept opened. Presents vector diagrams of the process and gives some photographs of this type of retaining wall in actual service. Constructions like this can be used only in localities where there are steady, strong prevailing winds.

BS

28T50

1954, M. 1. --

"The Determination of the Basic Parameters of Electrified Mining  
Stock for Open-Pit Coal Mining." Cand Tech Sci, Moscow Mining Inst Lenin  
I.V. Stalin, 4 Nov 54. (VM, 22 Oct 54)

Survey of Scientific and Technical Research on Defense at  
USSR Higher Educational Institutions (10)

SO: Ser. No. 471, 5 May 55

TYMOVSKIY, Leonid Georgiyevich; GRAVE, Ivan Platonovich; ~~POTAPOV, M.G.~~  
otvetstvennyy redaktor; KOLOMIYTSEV, A.D., redaktor izdatel'stva;  
KOROVENKOVA, Z.L., tekhnicheskij redaktor

[Mine haulage] Kar'ernyi transport. Moskva, Ugletekhizdat, 1957.  
358 p. (MIRA 10:9)

(Mine haulage) (Strip mining)



SOV/118-59-1-12/16

On the Use of Continuous-Motion Equipment in the Open Mining Pits

and of new basins and deposits to become operative within the next 10 years (table 3 on page 49). These new deposits will need about 408 additional excavators including 312 of the rotor type. Introduction of extensive continuous-motion conveyor equipment can eliminate the need for about 1,000 dump+trucks, a great deal of other transport and equipment and over 1,500 km of railroad tracks. A complex unit of such type, of 3,000 m<sup>3</sup>/h capacity, has already been designed by the Novo-Krematorskiy mashinostroitel'nyy zavod (Novo-Kramatorsk Machine Building Plant). Regarding new developments: The Yuzhnyy gornoobogatitel'nyy kombinat (The Southern Ore-~~Concentration~~ Combine) has been put into service in the Krivoy Rog Basin. Its annual capacity will reach 9,000,000 tons. The Lebedinskiy and the Mikhaylovskiy open coal mines of the Kursk Magnitnaya Anomaliya (Kursk Magnetic Anomaly) will be put into operation in 1960.

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Their capacity is expected to reach 10,500,000 tons per year. The construction of a new Chernomorskiy Rudnik (Black Sea Mine) of about 5,000,000 tons annual capacity is planned in the area of the Kerch Iron Ore Basin. Soon, open ore pits will be opened in the Lisakovskiy, Sarbayskiy, Kacharskiy and Ayatskiy deposits in the Kazakhskaya SSR. It is estimated that their capacity will exceed 30,000,000 tons per year. Further, open manganese ore pits will be opened up in the Nikopol' Basin; by 1965 they are expected to have produced 70-80% of the whole output of manganese ores obtained in that basin. There are 4 tables, 2 diagrams.

Card 3/3

POTAPOV, Mikhail Gennadiyevich, kand. tekhn. nauk; STAKHEVICH, Ye.B.,  
inzh., retsenzent; KRASAVIN, V.A., inzh., retsenzent;  
BYKHOVSKAYA, S.N., red.izd-va; MAKSEDOVA, V.V., tekhn. red.

[Open-pit mine haulage] Kar'ernyi transport. Izd.2., perer. i  
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(Mine haulage)  
(Strip mining--Equipment and supplies)



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SOKOLOVSKIY, M.M., inzh..red.; KOLOMIYTSYEV, A.D., red.izd-va;  
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SOV-127-58-10-27/29

AUTHORS: Mel'nikov, N.V., Corresponding Member of the AS USSR;  
Krasnikov, A.S., Nikonov, G.P., Potapov, M.G., Simkin, B.A.  
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Belyayev, A.A., Mining Engineer

TITLE: B.P. Bogolyubov and B.P. Yumatov, "Mining Machines" (B.P.  
Bogolyubov i B.P. Yumatov, "Gornyye mashiny")

PERIODICAL: Gornyy zhurnal, 1958, Nr 10, pp 78-79 (USSR)

ABSTRACT: This is a review of the above mentioned book.

1. Mining industry---Equipment 2. Literature---USSR

Card 1/1

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